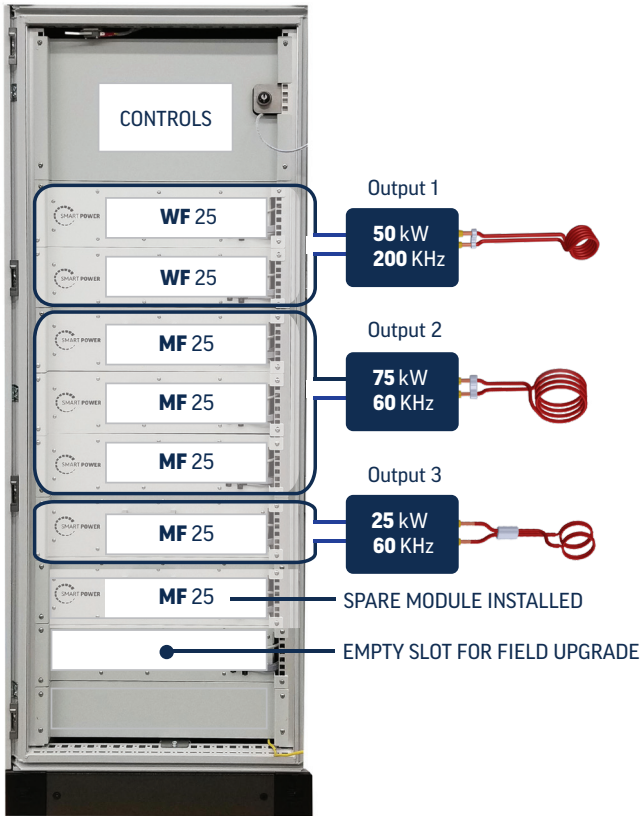


## Why SmartPower™ Systems are so innovative?



- Ultraflex SmartPower™ Compac Systems are a breakthrough innovation in the induction heating technology, featuring the Direct Digital Step™ control algorithm and a unique configurable modular approach.
- Configurable and field upgradable power supplies with output power from 50kW to 400kW.
- Wide output frequency range – two ranges available from 6kHz to 60kHz and from 40kHz to 200kHz.
- Zero down time can be achieved if additional module (N+1) is installed in the system.
- Latest SiC transistor technology and proprietary digital control algorithms ensure optimal performance and maximum efficiency in a wide frequency range.
- Ultra-flexible, wide range load impedance matching by utilizing multiple transformer ratios and configurable capacitor banks.
- Configurable to work with a single or multiple, independently controlled RF outputs from one cabinet.
- Can operate with optional heat stations allowing the load coils to be placed remotely.
- Durable and reliable design with built-in tuning, safety and diagnostics features.
- Industry 4.0

## FEATURES

### Operation

- Precise power control from 0 to 100% of rated power
- Output regulation: Voltage, Power, Current
- Parameter Monitoring: Current, DC Volts, Output Volts, Power, Frequency
- Control modes: Automatic, Remote or Local control
- RF Amplifier modules operating in a wide frequency range (6kHz – 400kHz)
- Automatic frequency scanning and load tuning
- Fast dynamic response and ramp-up time for short heating cycles
- Variable ratio transformer for matching to a wide range of loads and coils

### User Interface

- Industrial control panel – LCD touch display, full color
- Advanced and intuitive user interface
- Multiple heating programs and profiles for automatic process control
- High accuracy cycle-by-cycle energy monitoring
- Built-in temperature control and monitoring features
- Data logging of process and operating parameters

### Control

- 0-10V or 4-20mA external control and remote Start/Stop operation
- Ethernet and USB connectivity for firmware upgrades and diagnostics
- RS485 (MODBUS) serial interface for remote control and monitoring



## Advantages, Benefits and Cost Savings

**Configurable Power and Frequency** – Systems can be reconfigured in the field for different power and frequency ranges, allowing them to be used for different applications.

**ZERO production down time** - The system will continue to work at full power by shutting down a failed module (if equipped with extra capacity module). Or, if no extra module is available, it will continue to operate at reduced power.

**Most compact** – significantly optimized size and weight saves floor space and shipping costs.

**Energy savings** - highly efficient system (>95%) resulting in significant energy savings over the life of the equipment.

**Reduced cooling requirements** - smaller cooling systems are required, and less energy is dissipated in the cooling system, resulting in additional cost savings.

**Reduced maintenance cost** – Modular system, easy to service and maintain.

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**Increased Productivity** - Fast response and ramp-up time, reducing the heating cycles.

**Scalable and Field Upgradeable** - Capacity and productivity can be easily increased by installing additional power modules to the existing system.

**Modern Controls**– 10" Industrial touch panel with intuitive user interface and remote connectivity features (Ethernet, USB, RS485).

**Process Monitoring** – Built-in Temperature control and Energy monitoring software ensure excellent process control and validation.

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